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Customer No.: 31561 Application No.: 10/709,036

Docket No.: 12468-US-PA

**AMENDMENT** 

To the Claims:

1. (currently amended) A laser annealing apparatus, adapted used to perform a laser

annealing process for annealing an amorphous silicon thin film, comprising:

a laser-generating module, adapted used to provide a laser beam to recrystallize anneal

the amorphous silicon thin film to form a polysilicon thin film;

a resistance-measurement module, adapted-used to measure a sheet resistance of the

polysilicon thin film for obtaining a sheet resistance value; and

a host circuit module, electrically coupled to and between the laser-generating module

and the resistance-measurement module, the host circuit module, according to the sheet

resistance value, outputting a feedback signal to the laser-generating module, for optimizing an

energy density of the laser beam.

2. (currently amended) The laser annealing apparatus of claim 1, further comprising a

supporting module, wherein the supporting module is moveably located between the

laser-generating module and the resistance-measurement module, adapted used to support the

amorphous silicon thin film, and electrically coupled to the host circuit module.

3. (original) The laser annealing apparatus of claim 1, wherein the laser-generating

module comprises:

a laser beam source; and

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a control circuit, electrically coupled to and between the laser beam source and the host

circuit module.

4. (original) The laser annealing apparatus of claim 3, wherein the laser beam source

comprises an excimer laser.

5. (original) The laser annealing apparatus of claim 1, wherein the

resistance-measurement module comprises:

a measurement terminal; and

an output circuit, electrically coupled to and between the measurement terminal and the

host circuit module.

6. (original) The laser annealing apparatus of claim 5, wherein the measurement

terminal comprises a probe set.

7. (currently amended) The laser annealing apparatus of claim 1, wherein the host

circuit module is installed in a database, and the host circuit module is adapted used to compare

the sheet resistance with a plurality of referential resistance values stored in the database for

generating the feedback signal.

Claims 8-11. (cancelled)

3.